

## Environmental Protection Agency

§ 60.542

$D_r$ =density of VOC recovered by an emission control device (grams per liter)  
 $E$ =emission control device efficiency, inlet versus outlet (fraction)  
 $F_c$ =capture efficiency, VOC captured and routed to one control device versus total VOC used for an affected facility (fraction)  
 $F_o$ =fraction of total mass of VOC used in a month by all facilities served by a common cement or spray material distribution system that is used by a particular affected facility served by the common distribution system  
 $G$ =monthly average mass of VOC used per tire cemented or sprayed with a water-based green tire spray for a particular affected facility (grams per tire)  
 $G_b$ =monthly average mass of VOC used per bead cemented for a particular bead cementing affected facility (grams per bead)  
 $L_c$ =volume of cement or spray material used for a month (liters)  
 $L_r$ =volume of VOC recovered by an emission control device for a month (liters)  
 $M$ =total mass of VOC used for a month by all facilities served by a common cement or spray material distribution system (grams)  
 $M_o$ =total mass of VOC used at an affected facility for a month (grams)  
 $M_r$ =mass of VOC recovered by an emission control device for a month (grams)  
 $N$ =mass of VOC emitted to the atmosphere per tire cemented or sprayed with a water-based green tire spray for an affected facility for a month (grams per tire)  
 $N_b$ =mass of VOC emitted per bead cemented for an affected facility for a month (grams per bead)  
 $Q_a$ =volumetric flow rate in vents after a control device (dry standard cubic meters per hour)  
 $Q_b$ =volumetric flow rate in vents before a control device (dry standard cubic meters per hour)  
 $Q_t$ =volumetric flow rate of each stream vented directly to the atmosphere from an affected facility or from a temporary enclosure around an affected facility (dry standard cubic meters per hour)  
 $R$ =overall efficiency of an emission reduction system (fraction)  
 $T_d$ =total number of days in monthly compliance period (days)  
 $T_o$ =total number of tires cemented or sprayed with water-based green tire sprays at a particular affected facility for a month  
 $W_o$ =weight fraction of VOC in a cement or spray material.

### § 60.542 Standards for volatile organic compounds.

(a) On and after the date on which the initial performance test, required by § 60.8, is completed, but no later than 180 days after initial startup, each owner or operator subject to the provisions of this subpart shall comply with the following conditions:

(1) For each undertread cementing operation:

(i) Discharge into the atmosphere no more than 25 percent of the VOC used (75 percent emission reduction) for each month; or

(ii) Maintain total (uncontrolled) VOC use less than or equal to the levels specified below, depending upon the duration of the compliance period:

(A) 3,870 kilograms of VOC per 28 days,

(B) 4,010 kilograms of VOC per 29 days,

(C) 4,150 kilograms of VOC per 30 days,

(D) 4,280 kilograms of VOC per 31 days, or

(E) 4,840 kilograms of VOC per 35 days.

(2) For each sidewall cementing operation:

(i) Discharge into the atmosphere no more than 25 percent of the VOC used (75 percent emission reduction) for each month; or

(ii) Maintain total (uncontrolled) VOC use less than or equal to the levels specified below, depending upon the duration of the compliance period:

(A) 3,220 kilograms of VOC per 28 days,

(B) 3,340 kilograms of VOC per 29 days,

(C) 3,450 kilograms of VOC per 30 days,

(D) 3,570 kilograms of VOC per 31 days, or

(E) 4,030 kilograms of VOC per 35 days.

(3) For each tread end cementing operation: Discharge into the atmosphere no more than 10 grams of VOC per tire (g/tire) cemented for each month.

(4) For each bead cementing operation: Discharge into the atmosphere no more than 5 grams of VOC per bead (g/bead) cemented for each month.

(5) For each green tire spraying operation where only water-based sprays are used:

(i) Discharge into the atmosphere no more than 1.2 grams of VOC per tire sprayed with an inside green tire spray for each month; and

(ii) Discharge into the atmosphere no more than 9.3 grams of VOC per tire sprayed with an outside green tire spray for each month.

(6) For each green tire spraying operation where only organic solvent-based sprays are used:

(i) Discharge into the atmosphere no more than 25 percent of the VOC used (75 percent emission reduction) for each month; or

(ii) Maintain total (uncontrolled) VOC use less than or equal to the levels specified below, depending upon the duration of the compliance period:

(A) 3,220 kilograms of VOC per 28 days,

(B) 3,340 kilograms of VOC per 29 days,

(C) 3,450 kilograms of VOC per 30 days,

(D) 3,570 kilograms of VOC per 31 days, or

(E) 4,030 kilograms of VOC per 35 days.

(7) For each green tire spraying operation where both water-based and organic solvent-based sprays are used:

(i) Discharge into the atmosphere no more than 1.2 grams of VOC per tire sprayed with a water-based inside green tire spray for each month; and

(ii) Discharge into the atmosphere no more than 9.3 grams of VOC per tire sprayed with a water-based outside green tire spray for each month; and either

(iii) Discharge into the atmosphere no more than 25 percent of the VOC used in the organic solvent-based green tire sprays (75 percent emission reduction) for each month; or

(iv) Maintain total (uncontrolled) VOC use for all organic solvent-based green tire sprays less than or equal to the levels specified under paragraph (a)(6)(ii) of this section.

(8) For each Michelin-A operation:

(i) Discharge into the atmosphere no more than 35 percent of the VOC used (65 percent emission reduction) for each month; or

(ii) Maintain total (uncontrolled) VOC use less than or equal to the levels specified below, depending upon the duration of the compliance period:

(A) 1570 Kilograms of VOC per 28 days,

(B) 1630 Kilograms of VOC per 29 days,

(C) 1690 Kilograms of VOC per 30 days,

(D) 1740 Kilograms of VOC per 31 days, or

(E) 1970 Kilograms of VOC per 35 days.

(9) For each Michelin-B operation:

(i) Discharge into the atmosphere no more than 25 percent of the VOC used (75 percent emission reduction) for each month; or

(ii) Maintain total (uncontrolled) VOC use less than or equal to the levels specified below, depending upon the duration of the compliance period:

(A) 1310 Kilograms of VOC per 28 days,

(B) 1360 Kilograms of VOC per 29 days,

(C) 1400 Kilograms of VOC per 30 days,

(D) 1450 Kilograms of VOC per 31 days, or

(E) 1640 Kilograms of VOC per 35 days.

(10) For each Michelin-C-automatic operation:

(i) Discharge into the atmosphere no more than 35 percent of the VOC used (65 percent emission reduction) for each month; or

(ii) Maintain total (uncontrolled) VOC use less than or equal to the levels specified under paragraph (a)(8)(ii) of this section.

**§ 60.542a Alternate standard for volatile organic compounds.**

(a) On and after the date on which the initial performance test, required by § 60.8, is completed, but no later than 180 days after September 19, 1989, each owner or operator subject to the provisions in § 60.540(b) shall not cause to be discharged into the atmosphere more than: 25 grams of VOC per tire processed for each month if the operation uses 25 grams or less of VOC per tire processed and does not employ a VOC emission reduction system.